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FIG. 1

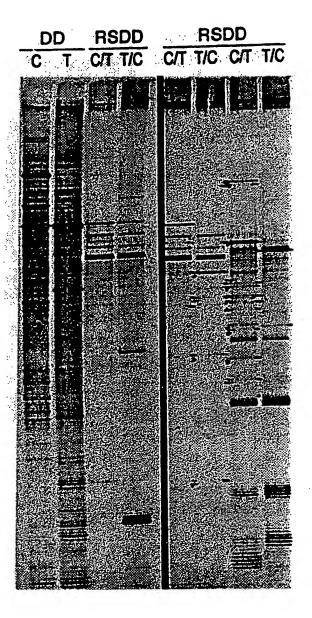


FIG. 2

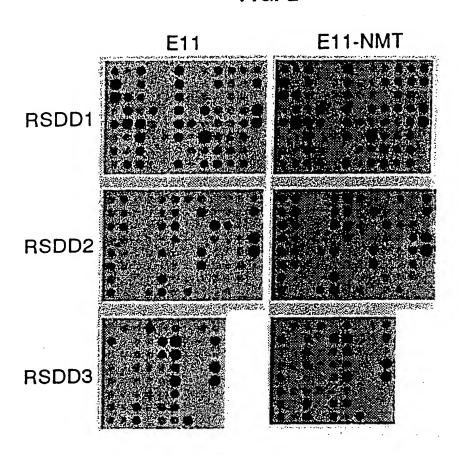
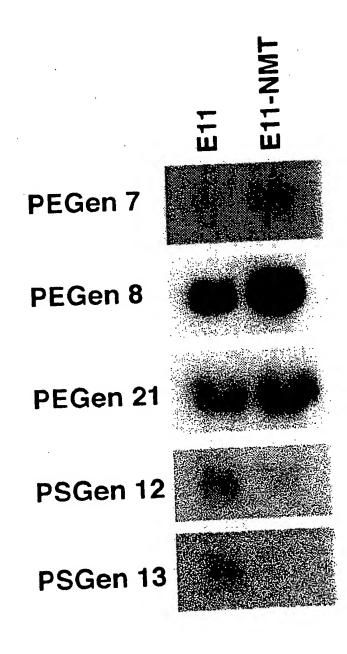


FIG. 3A





TMN-11

PSGen 3

PSGen 9

PEGen 8

PEGen 13

PEGen 20

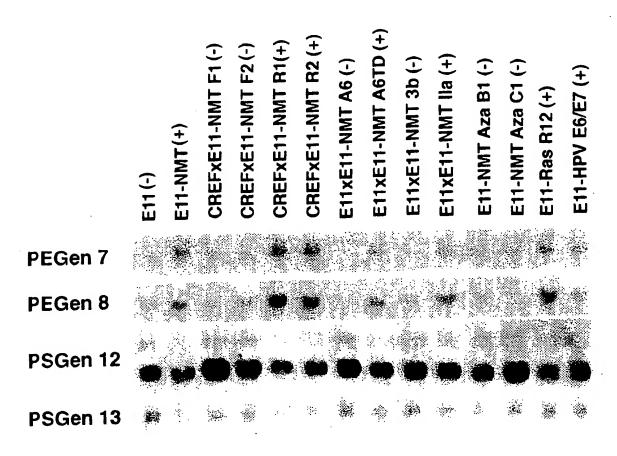
PEGen 24







FIG. 4



PEGen 7-90% homology to human HPV16 E1BP

TAAANCGGTG	GTACTGCTGC	ACGGTCCTCC	GGGTACTGGA	AAGACATCCC
TTTGTAAGGC	ATTAGCCCAG	AAACTGACCA	TCAGACTGTC	AANCAGGTAC
CGGTATGGCC	AGTTAATTGA	AATAAACAGC	CACAGCCTAT	TTTCTAAGTG
GTNTTCAGAA	AGTGGCAAGT	TGGTAACTAA	GATGTTCCAG	AAGATTCANG
ACTTGATTGA	TGATAANNAA	NCTTTGGTGT	TTGTCCTGAT	TGATGANGTA
AGCACTCANN	GGTACTCATT	CTTNGTCTGC	ATTGCCTCTT	GCTATTACTG
	CTCATTTGGT		GCNANCTCTT	TTCTATGGAT
CTTTTCCNAN	CCACCCGTTT	С		

FIG. 6

PEGen 8-Rat phosphofructose kinase C

GTGACGTAGG	GTCTGTTGCG	TCAATGGTTA	TAGCAAGTGA	TGCTCTCTGA
	TGACAATACT			
	GTTACAAAAA			
CCCTAGGTAA	GTGTGCAGGT	CAGGAGACGG	CATATTCAAT	CAGATGGCTG
ATAGTTCTCC	GTGGTTATGC	ACCGGCTCCA	GCTTGCCTAC	GTCAC

FIG. 7

PEGen 13-Novel

AGGCAGATGG TGTGCAGAGA	ACTATCTGCA CGAGCAGGGC AANTCTGGGC	TCATCAAGCG GAGGCACTTA	AGGGCTTGTG	TCGGCGGCTA
AGTGCCTCGC CTTGATGATG	CCAGACTTCT CCTGCTCGTC CAGATAGTCC TTAAATTCAT	TCTGCACATA ATCTGCCTTT	GCCGCCGACA CTCTCCCCTT	CAAGCCCTCG GCCCTGCTAT

FIG. 8

PEGen 14-Novel

GCCATAAATA CACTTTATTT CATTCGAAAT GCATAATCAC ACTGGGAGCA CTCCCTTTGG AGCACTCCTC TAGCAGCAGG TCCGAAGTGC TCCAGCATCG TCAGCTGGCT CCAACACCTA CGTC

FIG. 9

PEGen 15-Novel

TTTTTTTTT TTTGGAAACA GAATAAAGTG CTTTATTCTC TGGCTGGCTC TCCTACGTCA C

PEGen 21-94% homology to mouse FIN 14

TCGGCGATAG CATTGGAGCA AGTCTTATCA GCAAGCAATG TTTTCAGTTA
TGTTTCAAAG TTAAGAATGG GTTTAAACTT GCTGAACGTA AAGATTGACC
CTCAAGTCAC TGTAGCTTTA GTACTTGCTT ATTGTATTAG TTTANATGCT
AGCACCGCAT GTGCTCTGCA TATTCTGGTT TTATTAAAAT AAAAAGTTGA
ACTGCAAAAAA AAAAAA

FIG. 11

PEGen 24-Novel

بالمانان المانان المانانات	TTTTTTTTT	TTTTTTTTT	TTTTTTTTT	TNGCCAGGCT
	டம்பு தார் தார்	Δጥጥ Δጥጥ Δጥጥ Δ	TTATTATTAT	TATAAATAAA
ATGTCTCAGA	CITIMITATE	MA CARATACMA	mmma meneera	ጥን እ ርርርጥጥርጥ
ACATGTNCTT	TCAATTAGGT	TACAANAGTA	TTTATCTCCA	IMACGCITCI
TCATACATCC	TTAGTTTTGG	ATTAAAGTAC	CATCCACCCC	AACTCAAACT
CTAACCCCCA	GTAATCCCCT	CTAACGTGGA	AATTTCTGGT	TTAACAACTC
GIMACCCCC.	CCCACAAACA	GTGGGAGGCC	GCTCTTGCAT	GGCTATGCCA
AGTTAACTGC	CCCACAAACA	GIGGOVGCC	CCCT	
CGTAACCCTT	CACTGCTTCA	CTTCTTCGCT	GGCI	

FIG. 12

PEGen 26-Rat poly ADP-ribose polymerase.

GACCGCTTGT ACCATCCAAC TTGCTTTGTC TTCTGCAGAG AGGAGGCTAA AGCCCTTGAG CTGGCTGGCA CTGTACTCAG GCCGGAAGCC CAGCTCGTCC CGGTTCTTGA CAAAGCAAGT TGGATGGTAC AAGCGG

FIG. 13

PEGen 28-Novel

TCCCGACCTG	GGTATTGTGA	CGGTTGATAA	TGGCGGCATC	ATGTTGCCAG
CHACCGGGTA	AGCAGACCTC	AGAGCACAGC	TTATTGTCCA	GTGCTTTCAC
CCTCCCCACG	TCAAAGTCAT	TGTTATTGTC	ACACTCCATG	CCTAGAAATG
CCCAMCTCCT	CTGGCCATCT	TCTTGCACAG	GGGATCTGTC	CTCTTCCTCC
A THE A THAT THE A THE	THE	ATCCTGCTCT	CCAGCTGGAA	GGCCAGCAAA
ATTGCTGTCT	GGGGACTCTG	CTGGGGTCTC	CTCCTCTTCT	GAAGGGCCC
TGCTAGCAGC				

FIG. 14

PEGen 42-Novel

አ	ATGGACTTGG	GTCGGACATC	TTAGTGACCT	GTGAATTCTT
CTCTCCACCC	TCACTCTCAC	GTAGCCGAGT	TTAATATCTG	TGCTATTTAC
MANA CTATCT	GCCACCAAAT	TGTACCAACT	CATAGTTTTA	TATGAATGIT
CAMCACTOTO	ጥልጥሮልጥልልልጥ	AGAATTGTTG	ATACATCCTT	AATTTGTGCA
A MARITICE A TIC	AAGAAGATTG	TTATCAATTA	AAACCACGCC	TCTTTATGAT
CCTNNNAAAA	AAAAAAAAA	AAAAAAAAA	AAAAAAAA	AAAAAAAAA
A A CONCOTO A	AATCCATNGG	TTCTAACCCA	AAACCCT	

PEGen 43-Novel

CTCACGTCTG GCCCTATCAA ACCAAATCAA TGTCAGGTCA CTGTTCAAAT	CATACACCAT AACCTGAGAA ATTATATTAG TTAGTTTGAG TAAGGAGGGG AGATAAACTG	TAAGTCACCA ACTCCTCAGT GGCCAAAATC GAGGGACTCA	GCTCTTGACA GTCCCGCCAT CTGTTGGGTT ATTCATGGGA	GTAAACATGG GTGGCCTTGC TCAAATAAAG ACATTTTTAC
AGACCCT				

FIG. 16

PEGen 44-Novel

CCCTGACGAT	AAATGGTAAG	GAACTTTTTT	TTTTTTTTT	TTTTTTTTT
	GAAATAAACA	AACACAGCTT	ATTATTTGGG	GGAACATTAA
TITITITIO	TGAACACAAA	ANAAAATTAA	NANTTAATGG	GGGGGTANAA
MITCIAINAM	ATCTATCTGG	TATCATGACA	TTGAAGCANA	NACCTGANTG
GGGACTITGA	GAGAGAGAGA	GAGAGAGAGA	GAGAGAGAGA	GAGAGGTTTC
ACCAGAAAGA	GTGTTACAGG		СТАТТАСТСА	GGGACC
ATATGAGCTA	GIGITACAGG	CITIMITAGI	CIMILMOIGH	

FIG. 17

PEGen 48-Novel

A ATC GGGCTG	GATGGGTGTA	TCCGGCACTG	TTTCGTAGCG	GCAGCAACTG
CCTCCTTCTA	TCTGAAAGCG	GGCTTCACAA	AAACTACTGC	GCCACCCGAC
mcccmccccc	ATCGCCCGGT	GGCGAGTACC	GTATCGCCTT	TCCTGGTGCA
CANCANCTOT	TTACAGGAGG	CGGTCATTTA	CCGCAATCTG	ATTCTGTTTT
THE THEORY OF THE THEORY	TEGEGGGTGA	TCGCGATCGG	CAGTTTGAAA	ACGATCGTTG
AATCCACGCT	CGGGAATGAT	GTGGCTTCGC	CGCCAACGCT	TACTGACATT
TCATTTGTAC	AGCCCGATT			

FIG. 18

PSGen 1-80% homology to B. taurus supervillin

CCCGAGCTGT	GTAAAACCAT	CTATCCTCTG	GCAGATCTAC	TTGCCAGGCC
ACTICCAGGG	GGGGTAGACC	CTCTAAAGCT	TGAGATTTAT	CTTACAGATG
AACACTTCGA	GTTTGCACTC	GACATGACCA	GAGATGAATT	CAACGCACTG
CCCACCTGGA	AGCAAATGAA	CCTGAAGAAA	GCGAAAGGCC	TGTTCTGAGG
CTCACATGAC	AGCCACAGAG	AGGTCACTGC	CACTAGACCA	GAAAGTGGAT
CCACATATAT	ATTTGGACTG	GTGTTTTTT	CTGTCAG	

PSGen 2-91% homology to human HTLV-1 Tax interacting protein

ATCGGGCTGC AGATTGGAGA CAAGATCATG CAGGTGAACG GCTGGGAC	~\$*}_T
FIGURE ACTION AGENT AGENT GENERAL GEORGET ANALGITY	-GG
CONNECT CCCCTCCTC GTGACTCGGC AGTCTCTGCA GAAGGCC	2 TW
CONCRETE TO THE CONCRETE TO TH	-10
COMPRESSION CONCERNATION OF THE PROPERTY OF TH	LCT
CCCMCCTCCT CTCTCCTANG CCCCAGCTCT GAGGAGTAAC AGCTGAT	CCC
AAAGGTCCAA GCCAACCTTC TTACCCCTCA GCCCCCANCC CGAT	

FIG. 20

PSGen 4-Rat proteasome activator

TTTTTTTTT GAGGGAGGAG AGTCAAGAGT GGCTCAATAG	ACCCCAGCAG AGGAAGGTTT	GAAGAAGACT CTGTTATACC TTGTCTCTCC	GGGTGCAGTC CATCATAGAA ACGGGGCTTC	TAGAGTTCCT CGAGAGAGGG TTGAGCTTCT
GGCTCAATAG CAAAGTTCTT TCCATGACCA	CACCATCATG	TCATATAACA	CAGCATAAGC	GTTACGGATC

FIG. 21

PSGen 10-Rat Ferritin Heavy Chain

AANATCTGCT	TAAAAGTTCT	TTAATTTGTA	CCATTTCTTC	AAATAAAGAA
TTTTGGTACA	AATTAAAGAA	CTTTTAAGCA		TGCAACTAAT
36333363773	AAGGCAGCCT	GACATGCATG		GTGACCAGTA
A A COUCA CATIC	NCCTTGGGAC	GTCAGCTTAG	NTTTATCACN	GTGTCCCAGG
AAGICACATO	AAAGAGATAT	TCTGCCATGC	CAGATTCAGG	GGCTCCCATC
GGTGCTTGTC	THE CTE A CETE	GTCACCCAGT	TCTTTAATGG	ATTTCACCTG
TTGCGTAAG1	TOGICACOIO	CAATGAAGTC	ACATAAGTGG	GGATCATTCT
CTCATTCAGG	TAATGCGTCT	AGTTCCAGTA	GTGACTGATT	CACACTCTTT
TGTCAGTAGC	CAGTTTGTGA	CATTGCATTC	ACCCCCCTCT	CCCAGTCATC
		CATIGCALIC	AGCCCGCICI	000000
ACGGTCACNT	A			

FIG. 22

PSGen 12-Novel

CTGATGAAGT CAGGCACATT	TGAGGCACTC GGACACCACC	TTCTGCACTG TTCCCATGGA TAGGGGCTGC	CTACAGCGTC CCCTCTTCCC	CAGTTTCACC GCCTGGGGGC AATGCCATTG ATTCAGCCAA AGAAAATAAA
CACTGAGTGT	TGGGAGATTI	AAAAAAAA	12221011011	

PSGen 13-Novel

GTAGGCAATA AAATGTTTTC AGAGGTGCGA AAAAGCTTTT GTTTTCTTAA ACCATTCTTA GTCTCTGCCA CACTTGACAC TCCGTCAAAG TGAGAAGCGA ACTAAAGACC AACTGCGGTG GAAAATATTA TGTTTATGTA ATAAAAAAAA ATCATGTAAC TGCAAAAAAA AAAAAAA

FIG. 24

PSGen 23-Novel

TGC	CGAGCTG	AAAACATACA	TCCGCACCGG	GTTGAGATAG	CTGGCCCTCC
		ATACTCTTTG	GATAAGAACC	CCGGCCTTGT	TACCAGGTAC
			ACCGTCGAAA	TGGGTGATGT	
			CAGATTCTTT	GGGTTCCACA	
		GCAGAAGCGG	TCAAGTAATG	CAGCATTACA	
	TTTTCTT			AACCAGCGAT	
		AAAGCGACGG	CAAAACTTTT	GTTATATTCC	
			CCGAATAACT	TTTAATTTTG	
GCA'	TACTAGA	TTTTTAGCGG	TTGCCTCCTG	GCCATTGCTT	
CAC	AGCGTCA	GCCCAGTTTT	ACCACNANGA	ATATCCTAAG	CGTTGAAACA
GGG	CACAGCC	GAAAAAAACN	CTGGCNACAA	AAAANATCCG	GACATCCTTT
TTC	CAATTTT	GAAACCGAAN	GCNCGCAAAC	NAAGGTTCTT	CGGGAAAAAA
AAT	CGCCAAA	ATACNCGANA	TCAAACTNTC	CAA	

FIG. 25

PSGen 24-Novel

TGCCGAGCTG GGGGGAGTTC CAGGAATTTG TGGACTATTT CCAGGAGGAA
TTGAGGAATC TAGAAGTAAT AAGAACTTCA CAAGTAGAAC AACAGAGTTA
ATTGACCTCT ATCCTTAAGA GTTACCAGAG AATTATTAAA AAACTAAAGA
ACAATCAAAG CCTGGTCCTG TGCCACCACC CAAAAACATG TATAGCCTAT
GTGCAGCTCG GCA

PSGen 25-Novel

	NNNTTNGNGG	NCNTCATGCN	CCAGGNTCCN	NCCCCCANAN
CTCANAGGGC	• • • • • • • • • • • • • • • • • • • •	CNGGAGTACT	TAAGTGGACA	NNCCACATGC
GANCHNCCNG	GTAAACTACA		AGNCTNTNCG	TGNCTCTCCT
GANGGNCAAG	GGGATCACCN	TCNCTCCTNC		TGTNTACAGN
GTNCNTNCAC	TGCCNCANAA	NGGANGCNCN	NNCTCCTATC	
AAACNTNGCN	CTNNCTCTAA	GCTCNCCCAC	TNTGTGGAAA	GGCNATGTGT
AAACNINGCT	CCCCTATCAC	GGCNGTTTGC	NAAANGGGGA	TGTNCTGCNC
GCGTGCCTCT	TTNGGTCACT	CCATGTTTCC	CAGTCCNACC	TGTTAGACNA
GGCGATGAAG		CTCNCTGTAA	GGGGANTNGC	GGACCCAGTA
AGNATTGNAN	TGTGATACGA		GTGGCTAACG	GCGCTTCCTA
TGTTTGGCCC	NACNNCCACT	TCTTTAAATG		CTTCCGNANA
GNATAAACAC	TATTGGTCCC	CCCCTCTGCA	GNACCCNTTA	
AAAATTGTTG		CGACAACCAC	ACCGTCTGTN	GNTTTTAGTT
		AAAGTTTCAG	AAATCTTCAT	
GCAACNCNNA		NAGGATTTGT	CGAATGTAAA	GTCTCCNGAT
TGAGCCCNTG				
CTTCAATAAA	NNTCCAAAAG	MCTWMCGWT		

FIG. 27

PSGen 26-Novel

AACCTCCNGG GANGGTCAAG TCTCTCTGTT	NNNTGGTNGN TAATCTACAC NGGATCACCA CCGTNCCCTG	NGGAGTCTTA TCNCCNCCTC CCGCTACACA	AGTNGACAAN CCAAGCTTNT TGGANGCTCT	NCATTGATGC
CTCNTCTTAC	NANNCAAACA	TTGCCCTNTC	TCATA	

FIG. 28

PSGen 27-Novel

CCNNNAGGAA TCCCNGGNNA AACCCTATANO CNANGGGACC CCAACNCGGG CCCNAACTNG GGGNAAANAN GGGCAAAA CCTNCCCGGG GNAAAANGGT ANCCCCTC
GGTNCCCGGG GNAAAANGGT ANCCCCTC

12/23

FIG. 29

PSGen 28-Novel

TGCCGAGCTG GGGGTGAAGC ACCGGAAAAC AACCGATCCA TCTCTTATCA CAGGGTCTCC AAGATCCCAA ACCCAAAAGC CACATTGTTA ATTAGCCTTT TTTTTTTTT TTTTTTTTT TTTTTTTT TTTTGGCAGC TCGGCA

FIG. 30

PSGen 29-Novel

TACGGGCGCT GATTTTTACG AACATTACCT GGCAGGGAAA TTTGATAAGT ATCCACTGTG GGTGGCGCAC TACCTGGTAA AAGACAAACC CCGTGTGAAA AGGCCCTGGA CTTTTTGGCA ACACAACGAA ACCGGCCACG TGAATGGCAT CCGGTCTTAT GTGGACTTCA ATGTTTTCAA CGGGGACAGC ACAGATTTTG CCGAACTATT AATGAAATAA TGCAGAATTT CGCTTTTCAA ATAAGCCCAT GGATCCTGAC GTAAAATATT TCCTGCTGGT GATCGTGCAG TCCATTTCGA TGCTCATACT TTGGCTGATG CTCAACATGA CCTTTGGGAT CTATTTTAAT TTTGCTTTCC CCGACAATGG TTTGACGCTT GGCAACATCA TTTATTACCT CTTCCTGCTG GGCAGCTCGG CA

FIG. 31

PEGen 32-Novel

TNCATANGCC CTGAGGTGGG GACGAAGCCC GAGTCCGTCC TGACATGTTT CCAGTGGAAA AGATTTTGTT NTGAGCGTTN CTTTCTNNTT TNTTTTNNNT TGNTTGTTNN ATGTTTTTGT TGTTGTTTTN TTNAAACTGT NTGTTGNCAN TTCAACATNA ANGGNAGGNA ANTNTGTGNC TNCNTTGCAN TGTNNCATGN TNCCCANANC CCAAAAAAAA AAAAAAAAA AAAAAGAGTA CAAATATCAC AAAATTTGAC ATTTTTGTAA TAATACTTTG GTTGTTGTTT GGTGACGGCG ATTG

FIG. 32

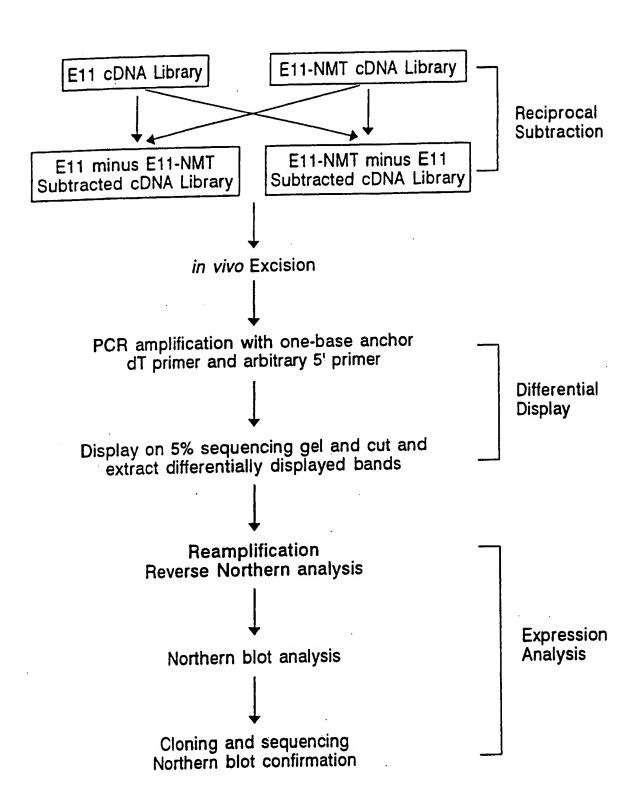


FIG. 33B FIG. 33A В A PSGen12 PEGen 24 PEGen 7 PSGen13 PEGen 8 PEGen 26 PSGen26 PEGen 13 PEGen 28 PEGen 14 PSGen27 PEGen30 PEGen 21 PSGen28 PEGen32 EtBr PSGen 29

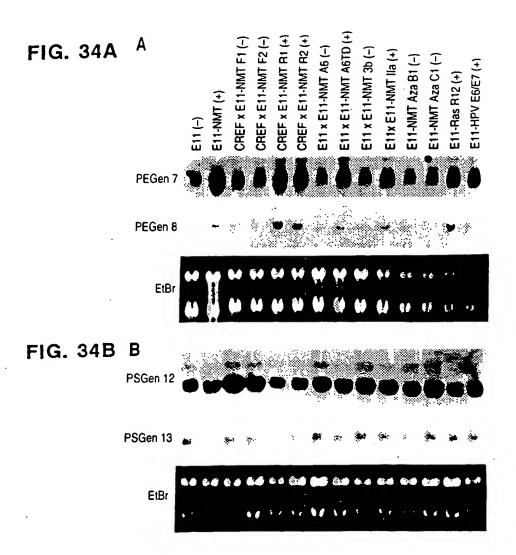


FIG. 35A

PSGen 12 cDNA Sequence

GCGGTGGTGA	CGGTAGTATG	GCCGCACTTT	ATGGTGGCGT	GGAAGGGGGA
GGCACACGGT	CCAAAGTCCT	TTTACTTTCT	GAGGATGGGC	AGATCCTGGC
AGAAGCAGAT	GGACTGAGCA	CAAATCACTG	GCTGATTGGC	ACAGGTACCT
GTGTGGAGAG	GATCAATGAG	ATGGTGGACA	GGGCTAAACG	GAAGGCTGGA
GTGGATCCTC	TGGTACCCCT	TCGAAGCCTG	GGCTTGTCCC	TGAGTGGTGG
GGAGCAGGAG	GATGCAGTGA	GGCTCCTGAT	GGAGGAGTTG	AGGGACCGAT
TTCCCTACCT	GAGTGAAAGT	TACTTCATCA	CCACTGATGC	AGCAGGTTCC
ATCGCCACAG	CTACACCGGA	TGGTGGGATT	GTGCTCATCT	CTGGAACAGG
CTCCAACTGT	AGGCTTATCA	ACCCTGATGG	CTCTGAGAGT	GGCTGTGGTG
GCTGGGGCCA	CATGATGGGA	GACGAGGGAT	CAGCCTACTG	GATTGCACAC
CAAGCTGTGA	AAATTGTGTT	TGACTCCATT	GACAACCTGG	AAGCAGCTCC
TCATGATATT	GGCCATGTCA	AGCAGGCCAT	GTTCAACTAC	TTCCAGGTGC
CAGATCGGCT	AGGAATCCTC	ACTCACTTGT	ATAGGGACTT	TGATAAGTCC
AAGTTTGCTG	GATTTTGTCA	GAAAATTGCA	GAAGGTGCAC	AGCAGGGAGA
CCCTCTTTCC	AGGTTCATCT	TCAGAAAGGC	TGGGGAGATG	CTGGGCAGAC
ACGTTGTGGC	AGTATTGCCA	GAGATTGACC	CAGTTTTGTT	CCAAGGGGAG
CTTGGCCTCC	CCATTCTGTG	TGTGGGCTCA	GTGTGGAAGA	GCTGGGAGCT
ACTGAAGGAA	GGCTTTCTCC	TGGCACTGAC	GCAGGGCCGA	GAGCAACAGG
CACAGAACTC	CTTCTCCAGT	TTCACCCTGA	TGAAGTTGAG	GCACTCTTCT
GCACTGGGAG	GGGCCAGCCT	GGGGGCCAGG	CACATTGGAC	ACCACCTTCC
CATGGACTAC	AGCGTCAATG	CCATTGCCTT	CTATTCCTAT	ACCTTCTAGG
GGCTGCCCCT	CTTCCCATTC	AGCCAACACT	GAGTGTTGGG	AGATTTCTCT
111111111	CACATGAGAA	AATAAATGCA	CTTTACTCCC	TCCCCAAAAA
AAAAAAAAA	AAAAAAAAA	AAAA		

PSGen 12 Protein Sequence

	compacembe	MILLI CEDCO	TT APADCI CT	NEWT TOTOTO
GGDGSMAALY	GGVEGGGTRS	KVLLLSEDGQ	ITWEWDGF2I	MUMPIGIGIC
VERTNEMVDR	AKRKAGVDPL	VPLRSLGLSL	SGGEQEDAVR	LLMEELRDRF
DUI CECVEIM	TONACCIATA	TPDGGIVLIS	GTGSNCRLTN	PDGSESGCGG
LIPSESILTI	IDMAGSIAIA	ILDGGI ATITO	G1 CD1(G1.DZ1)	
WGHMMGDEGS	AYWIAHQAVK	IVFDSIDNLE	AAPHDIGHVK	QAMFNYFQVP
DRIGITATILY	RDFDKSKFAG	FCQKIAEGAQ	OGDPLSRFIF	RKAGEMLGRH
DICUCTATION				NT MOCRECON
VVAVLPEIDP	VLFQGELGLP	ILCVGSVWKS	WELLKEGFLL	WTIÖGVEÖÖV
	W DUCCAT CC	ASLGARHIGH	HT DMDVCVNA	TAFYSYTF.
ONSESSETLM	LLKESSALG	WOLGWIGH	Une im Is any	**** * ~ * * * * *

FIG. 35B

PSGen 13 cDNA Sequence

GGCACGAGCT	CTCCTCGTCC	CCTCCCTTCT	CCACTGCAGC	CTTTCTCTTA
GCCCGAACCA	CTTCCTTCTT	CTGCTTGTTC	CTCCCTAGGG	CGCGGAAGCT
GAGTGCAGGG	TTCAGACCCA	CGCGGCGAGC	AGCTCTTCAG	TGAAGAAGGA
AGCAATCGGA	GGGTCAGCAA	TGAACGTGGA	GCATGAGGTT	AACCTCCTGG
TGGAGGAAAT	TCATCGTCTG	GGTTCCAAAA	ATGCCGATGG	GAAACTGAGT
GTGAAGTTTG	GGGTCCTCTT	CCAAGACGAC	AGATGTGCCA	ATCTCTTTGA
AACCGTTGGT	GGGAACTCTG	AAAGCCCGCA	AAACGAAGGA	AGATTGTTAC
GTACGCAGAA	GAGCTGCTTT	TGCAAGGTGT	TCATGATGAT	GTTGACATTG
TATTGCTGCA	AGATTAATGT	GGTTTGCAGA	TCTGGGGGTA	TCTGGTAAAC
TGGAATAATT	AAGTTAAAGG	ACAAACATGA	AGTTCCTTAT	GTATTTTTAT
AGACCTTTGT	AAACAAAAGG	GGACTTGTTG	AGAAGTCCTG	TTTTTATACC
TTGGAGCAAA	ACATTACAAT	GTAAAAATAA	ACAAAACCTG	TTATTTTTTT
TTTCTTAAGA	AGGTAATCGG	GAGACGTAGG	CAATAAAATG	TTTTCAGAGG
TGCGAAAAAG	CTTTTGTTTT	CTTAAACCAT	TCTTAGTCTC	TGCCACACTT
GACACTCCGT	CAAAGTGAGA	AGCGAACTAA	AGACCAACTG	CGGTGGAAAA
TATTATGTTT	ATGTAATAAA	AAAAAATCAT	GTAAAAAAA	AAAAAAAAA

PSGen 13 Protein Sequence

MNVEHEVNLL VEEIHRLGSK NADGKLSVKF GVLFQDDRCA NLFETVGGNS ESPQNEGRLL RTQKSCFCKV FMMMLTLYCC KINVVCRSGG IW

FIG. 35C

PEGen 28 cDNA Sequence

GTGTGGTGTG	TCTCTCAGAC	GTCCGTGACA	CTTTGATCCT	GCCCTGCCGG
CACCTGTGCC	TCTGCAACAC	CTGTGCAGAC	ACCCTGCGCT	ACCAGGCCAA
CAACTGCCCC	ATCTGCCGGC	TGCCCTTCCG	GGCACTGCTT	CAGATCCGAG
CCATGAGGAA	AAAATTGGGC	CCTCTGTCTC	CAAGCAGCTT	TAACCCCATC
ATCTCTTCCC	AGACTTCGGA	CTCTGAGGAA	CATTCATCCT	CAGAGAACAT
CCCTGCGGGC	TATGAAGTGG	TGTCTCTCCT	GGAGGCCCTC	AATGGGCCCC
TCACCTCATC	CCCAGCGGTG	CCTCCCCTTC	ACGTTCTTGG	AGATGGCCAC
CTCTCAGGAA	TGCTGCCGTC	CTATGGCAGT	GATGGCCACC	TGCCCCCTGT
TAGGACACTG	TCCCCCCTTG	ACCACCTGTC	TGATTGCAAC	AGCCAAGGGC
TCAAACTCAA	CAAGTCTCTC	TCCAAGTCCA	TTTCCCAGAA	TTCTTCTGTG
CTTCACGAAG	AGGAAGATGA	GCGCTCTTGC	AGTGAGTCAG	ACACTCAGCT
CTCTCAGAGG	CTGTCAGCCC	AGCATCCTGA	AGAGGGACCT	GATGTGACTC
CAGAGAGTGA	GAACCTCACG	CTGTCCTCCT	CAGGGGCTGT	TGACCAGTCA
TNTTGCACAG	GGACTCCGCT	CTCTTCCACC	ATCTCCTCCC	CAGAAGACCC
AGCCAGCAGC	AGCCTGGCCC	AGTCAGTCAT	GTCCATGGCC	TCCTCCCAGA
TCAGCACTGA	CACCGTGTCC	TCCATGTCTG	GCTCCTACAT	TGCACCTGGC
ACAGAAGAAG	AAGGAGAGGC	CCCACCTTCC	CCCCGAGCTG	CTAGCAGGGC
CCCTTCAGAA	GAGGAGGAGA	CCCCAGCAGA		AGCAATTTTG
CTGGCCTTCC	AGCTGGAGAG.	CAGGATGCAG	AGGGAAATGA	TATCATGGAG
GAAGAGGACA	GATCCCCTGT	GCAAGAAGAT	GGCCAGAGGA	CATGCGCATT
TCTAGGCATG	GAGTGTGACA	ATAACAATGA	CTTTGACGTC	GCGAGCGTGA
AAGCACTGGA	CAATAAGCTG	TGCTCTGAGG	TCTGCTTACC	CGGTACCTGG
CAACATGATG	CCGCCATTAT	CAACCGTCAC	AATACCCAGC	GCCGGCGACT
ATCACCCAGC	AGCCTGGAGG	ACCCTGAGGA	GGACAGGCCT	TGCGTATGGG
ATCCTTTGGC	TGTCTGAGGG	CACTGGCACC	TGTACCTGGG	CTTCCCCTCC
TGTCCGCCTT	CCATCTGTCC	TCACTGGACC	ACAGGCCTTC	TGGGCATCTT
CAACAAGACA	CGTGGACTTT	CTACTCTCAT	GAAGGGAGGA	CAGTGCAACC
CTCCACCAAC	TTCATCTCCT	GTAACCATGA	TTCTTACCCT	CTCAGAAAGT
ACCAGAAGCC	TTCCTCCTGT	GGGCTGATGT	GTGCCAGCCA	AACCCAGTGG
GTCAGCTGAG	CTGAGGGTCA		TTTCTGTAGC	CTTTTCTCTT
CCAAATGGAG	ACCAACGAGA	AANAAAAAA	AAAAAAA	

PEGen 28 Protein Sequence

VVCLSDVRDT	LILPCRHLCL	CNTCADTLRY	QANNCPICRL	PFRALLQIRA
MRKKLGPLSP	SSFNPIISSQ	TSDSEEHSSS	ENIPAGYEVV	SLLEALNGPL
TSSPAVPPLH	VLGDGHLSGM	LPSYGSDGHL	PPVRTLSPLD	HLSDCNSQGL
KLNKSLSKSI	SQNSSVLHEE	EDERSCSESD	TQLSQRLSAQ	HPEEGPDVTP
ESENLTLSSS	GAVDQSXCTG	TPLSSTISSP	EDPASSSLAQ	SVMSMASSQI
STDTVSSMSG	SYIAPGTEEE	GEAPPSPRAA	SRAPSEEEET	PAESPDSNFA
GLPAGEODAE	GNDIMEEEDR	SPVQEDGQRT	CAFLGMECDN	NNDFDVASVK
ALDNKLCSEV	CLPGTWQHDA	AIINRHNTQR	RRLSPSSLED	PEEDRPCVWD
DT.AV.		•		

FIG. 35D

PEGen 32 cDNA Sequence

GGCACGAGGC	GCCGCCTTCC	TGCTCGCGCC	CTATCGCCGC	CTTCCTGCTC
GCGCCCTATC	GCCGCCTCCG	AGTCTTCCTG	CGCCCCGGGC	TTCCGCCGCT
TCATTGATTT	CCGTTTCTCG	CCGCTGCAGC	CTCCTGACAC	GGTGATCCGG
GCGGGCCCCG	CAGGAATTTT	ATCCCCTCAC	CGGCCTCACA	CTAGTGTCGC
ATGTCCACTA	TCCAGAACCT	CCAATCTTTC	GACCCCTTTG	CTGATGCAAC
TAAGGGCGAC	GACTTACTCC	CGGCAGGGAC	TGAGGACTAC	ATTCATATAA
GAATCCAGCA	GCGGAACGGC	AGGAAGACGC	TGACCACTGT	GCAGGGCATT
GCGGACGATT	ATGACAAAAA	GAAACTTGTG	AAAGCTTTCA	AAAAGAAATT
CGCCTGTAAT	GGGACTGTGA	TTGAACACCC	TGAGTACGGA	GAGGTCATTC
AGCTTCAAGG	CGACCAAAGG	AAGAACATTT	GCCAGTTTCT	TTTGGAGGTT
GGCATCGTCA	AGGAGGAGCA	GCTGAAGGTT	CACGGATTCT	AAGATGAACC
CGAACATGTG	GCGAGTTTCT	TAAATGGTTT	TGTTGTCTAA	CTCAGTTTGG
CTGCCTCGGG	AGATGATTCT	TTACAGTAAA	CGACAGACTT	TGCGTTTATT
AAATCATTCA	GACTTCCACT	CACGCCTGCA	TGGCTACAGA	AAACATGGGG
TATGTAGGCT	CCTAAGTCAC	AAGGAAATCG	CCGTGAGGTG	GGGACGAAGC
CCGAGTCCGT	CCTGACATGT	TTCCAGTGGA	AAAGATTTTG	TTCTGAGCGT
TCATTTCTAG	TTTATTTTCA		AAATGTTTTT	GTTGTTGTTT
	TGTATGTTGC		TAAAGGAGGA	AAGTCTGTGC
GTCAAAAAAA	AAAAAAAAA	AA		

PEGen 32 Protein Sequence

MSTIQNLQSF DPFADATKGD DLLPAGTEDY IHIRIQQRNG RKTLTTVQGI ADDYDKKKLV KAFKKKFACN GTVIEHPEYG EVIQLQGDQR KNICQFLLEV GIVKEEQLKV HGF.

FIG. 35E

PEGen 42 cDNA S quence

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GGCGTTGCGA CGTGGACATG TCGGCGTCGT TGGTCCGCGC CACCGTGCGG
GCCGTGAGCA AGAGAAAACT GCAACCCACG CGGGCGGCGC TCACGCTGAC
CCCCTCTGCT GTGAACAAGA TAAAACAACT TCTTAAAGAC AAGCCTGAGC
ATGTGGGTCT GAAAGTGGGT GTGCGGACCA GGGGCTGTAA CGGCCTCTCT
 TACAGCCTGG AGTATACAAA GACAAAAGGA GATGCTGATG AAGAAGTTAT
TCAAGACGGA GTCCGAGTGT TCATCGAGAA GAAAGCCCAG CTAACCCTGT
TAGGCACAGA GATGGACTAT GTGGAAGACA AACTGTCCAG TGAGTTTGTG
TTCAACAACC CCAACATCAA GGGAACCTGT GGCTGCGGTG AAAGCTTTAA
CGTCTGAAAG CTGAGGACTG CAAACTCCAG GAGAGCTGGG TCTGCCTTGG
AGCACACCGA AGAAATCATG TGATGTCCCG TGTCGGAAGT TAGTGTGTGG
CTGCCTCGTG GTTGAGAATA AAGTGAAGCA TTGAAAATCA AGCCAGCGTG
TTAGAGTTCC AAAAACATGG TGTCTGTTCT CTGTAAGACA CAAATGGAGA
GAACATGGTG TCTGTTCTCT GGAGGACACA AACTGAGAAA CTGTTGAGTC
CTCTGTCCTG TACAGAAAAC TCCTACCCTG CCCTTACGCT GTAGCCTGCT
CTGTGCTAGA ACCAGCTTCG TGACCATTGC TTTGCTGGGA ATTGAGGAAT
GGGATAACGG GTGTGCACCT GGGTCACAGA ATGGCTTGAG ACTGTCTCCT
GGCCCTGTCT CACCTCAGGC AGGGCAGCTG TGGGAGCAGC AGCTGTGGGA
GCGGTGAGGG GACCTGGTTT CCCTCACCTG TGGCGTGGCC CGTTGCATCT
TTACCACGTG CCTGTTGTCA GATACCTCAT TTGCCAGCCT CCAGCAAGCT
CAGCTATGAG TGCCAGTCTC AGGAGGTAGG GATCACGGGC CTGGTGTCAG
TCTGTCCTCT GGGGCGTGCT TCATGCGGTT TGCTTAGACC TTTCAGTTAG
AAGCGCTTGT GATGAGCAGC CAGGTAGACC TGCTGAGAGC GTGGTTCTCA
GAGCTTCTGC CCAGCCCTCC TCACAGGTCA CAGCAGACAG TGCTGTCTGA
GACACTCGGT GAGGAGACAT CCTGCCTGGC CAGTGCTCTT ACCAGTTTAG
AGACTGCATT AGTTTTCTCT TGAATGGAAG CCTTGTGTAA ACCCTTTTGT
CTGAATGGCC ATCCTGTTTA GAGCTTTGAA CCAGTAGTGT CTTCCTTCAG
AAGATCTGCA GCAGAGGGGT CCCTCTCAGC ACGGCACCTG GGGGGCAGAA
CATGCACACA CTTACAGTTG CCAGGGTGCA GATGCTCCCT GCTTCCCAGA
GGAAGCTTCT AAGTTTCTTT AATGTGGTCA TCACCAGTTT TTTGAGCCAT
GGTTTTGCTG TATACTACAG GCCAGCCTTG AACCCACAAC AATCCTCCTG
CTTCCACGTT CAGAGGCATG TGCTACCACA CCTGACCTGG ATCCCAAGTT
TCTCTTTAAG TGGTCTTGAT GGACTTGGGT CGGACATCTT AGTGACCTGT
GAATTCTTCT GTGGAGGCTG AGTCTCACGT AGCCGAGTTT AATATCTGTG
CTATTTACTA AAGTATCTGC CACCAAATTG TACCAACTCA TAGTTTTATA
TGAATGTTGA TGAGTCTGTA TCATAAATAG AATTGTTGAT ACATCCTTAA
TTTGTGCAAT ATTGTATGAA GAAGATTGTT ATCAATTAAA ACCACGCCTC
AAAAAA
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PBGen 42 Pr tein Sequenc

RCDVDMSASL VRATVRAVSK RKLQPTRAAL TLTPSAVNKI KQLLKDKPEH VGLKVGVRTR GCNGLSYSLE YTKTKGDADE EVIQDGVRVF IEKKAQLTLL GTEMDYVEDK LSSEFVFNNP NIKGTCGCGE SFNV·

FIG. 35F

PEGen 45 cDNA Sequence

ACGAGCTGAA	GGTCACTTCG	CGCACGGGTT	GGACCTGGGG	CAGGTTGGAG
GAGTAGGAGT	ATGTCATTGG	GCGCGAAGAC	GGGGTCTGGG	GCAAAAAAGA
AGGGAGGCTG	GAGAAATCTG	GACCCGAGAC	GTAGTAAGTA	CAACTTGGCA
AATACATGTT	AGAGGAGCAG	GGACCACGCT	CATCAAAATC	CATCATTGGG
CTACCTTGGG	CTCTCCGCAG	TAGCCGAGCT	TAACATGATT	CTCCACTGCA
GCTGCCTCTT	TGAAGCGGAT	CCGTGAAGTA	GAAATTTGGA	GACGTAAGCT
GACGTGGAAA	TCTATCCCCA	TCCTTAGCAG	GGAGGTGCTG	GTCATGTGAC
CCGATGTTGA	AATTGACAAG	CCGCGAGCTA	GTCCCGGCTT	TTTTTTTTTA
ACCCCCTCC	CTTTCCTTTT	TTCCCCCTCC	CCTCCCTCCT	CGGCTTCCTT
TCTTTGTAGC	CACCTCAGGG	GAAGCAACAG	ATCGTCACTC	GGTGTTCTCA
CCGAAAGCAC	GTAATCGCCG	GTGTAACTCA	TGTTGGCTGG	GGGGCCTCCC
CGCTCGCAGA	AAGGCTGGGG	TGCGCCCCCA	AGCAGCTTTC	CTTTGCTCAG
CTGCATGGTC	CTGGTCCACG	AGCGCTCTGA	GGGCGGCAAG	AGAGCGCAAC
TCCTGACGCC	TCCCCCACT	CCCCGGTGGG	TGAGGGATGC	TCTGGGATGG
GGGTGGCCAG	GTGAACGCCC	GGAATTGTGT	AGCTTCAGGT	TCCGGAGTCT
GTTGTCCGAA	GGCTTACGTT	CAGCACCTTC	TTCGCAGTCC	CCCTCCCACA
GACTTGCTCT	GGAAAGCACC	TCAGTCTCAG	AATCTGGCTG	GACCCCATTT
GGGGCCAGGC	TTCGCAGCCA	CGATGTGCCG	GGCTTCGTGG	CTTGTCCGAT
TTGCACGGTG	ACTTGATTAC	ACGCTCTCAT	TCATGGTCAC	TTCCGAAGCG
CTTTAGTGCC	TTCCGTCCCC	AAACCGCCAA	CAGGCAAAGC	GGCTTTCCTC
CGCGGTTTGT	CAATAATCCG	CGCTGTCCGG	AAGGGCTTCG	CCTTACCCGG
GTTCCACCTT	CCCTGTATCT	TTCTGCTTAC	TTCCTCATCC	CACACTCTGT
CCTTGGAGGA	ACCCCTTCTC	CTCGCTGCCT	GTAGGGGTTC	GGAGTGACTC
CACAGAGCCA	GAGGCGCTTC	TGCTCACCGG	TCCGCAAGCT	GCCTGGTCTG
CTGAAGCTGA	CGAATCGGGA	AACCATGCAA	TTGAGGCGAA	CCTTGGGCTG
CTTTAGAGGC	GCTGAGGAGC	CTTCTCCTGG	GAGGCCCAAG	GTCGATTTCA
GCCCACCAGG	ATCTGGGGAA	GACCCAACTA	GGGGTAAGAG	CACACCGGAA
GGCCAAGTCC	GAGTTCCAGT	CCTAGAAGAG	GCGGCTGCGG	GCAAGGTTAT
GACATTGGCC	CTGGACACTG	GTTTCCCAGG	AGCTATTCTT	TCTCAAGAAC
TCCACAGCAC	GGGGCTGTCT	CCAGAAAATA	CTCTTCAACG	TTTATTTCCT
	ACCCGCAGCC	CTACGGCGGT	TAATGCGAGA	GGCCAAAAAT
0.0.0.0	AGAAAAACAA	AGGCAGGAAG	TGGCCGCGC	CTGACGGTGC
	GTAAAGAAGG		GTTCAATCTC	TTCTTTTTTT
			GTAGGGCCTG	
	GCATTTGGAG		AGTAAGGCTC	
	AGGAGATTTG		CAAACCAAGC	CTTTTTGGAG
	ATTTGGTCCT		TGCTAGTGTC	
	CTGTTTTCCT			AAGAAGGGAG
	GCACCTTGCG		TCCTTCCGAG	GTAGAATATC
AGAATAAAGT	GTATTCAGGT	GCCAA		

FIG. 35G-1

PEGen 50 cDNA Sequence

A:

ATCGGGCTGT	ACTAACAGAT	TGTTTGTAAA	CAGTGACACA	GTGATAACTT
CCGTGTTACT	TCTTAACTTT	ATGTTTCTGC	TTTCAGATCT	CCCTCCCCTT
CCAGAGGAAG	TTAGCGATGC	CATAGCTTTA	ATGTCTGTTT	TAGCTGCAAA
ACTCATTGTT	CACTTTCTGT	TAGAAAATCT	AAAGCAGGTG	GTATGCAATT
TCTCTTGATT	TGGAATTCTT	TAAAGGCAAG	TAAATTTGGA	ACTCCTGTGT
TGGGGGGTTA	ACGGAGGTAG	GAACCCAATG	GTGTGTCCCT	AGGTCGTCCC
CGTTCTCGGA	TAGCACAGTC	TGCATAGCCA	TAGCTCTCAA	TTATGTCACT
ACCCTAATCA	TCGCAGCCCG	GTTCTCACGG	ACTCTTTGAA	GTCCCAAAAT
GACTTTTGTT	TGATCCTGAT	TTGGATTTTC	AATGGAAAGT	AAAAGCTTGG
GGTGAGGAAG	CAGCAGCTAA	AGCAGGGAGT	TGAGCCAGTG	AATTGCTGAC
GGAAAGGATT	CTGGTCTTGG	AGGAGGGGA	CCTGAAGCAG	AAGGAAAAGG
GATCCTTCGC	TTAAGTTCTT	AGGAAAAATC	TTGACTCAGA	ATCCCAAGAT
TTTTCCCTTC	ATCCCAGCCG	GGTAAATATT	TGGTTTTGTC	TTTTAAGTAT
AGCATGAAGC	CCGTGGATGA	GAGCCATGTG	TTGTAGGATT	CTCTTCCCTA
TTGGCTCTGA	GCTTGTGTCA	CCGTATCAGT	TTGCTCCCTA	CAAAGGGACC
TAGTTTGGAA	AGGATTGGAA	GGGCAACTGT	TCAGCGGCAA	TGGAACACCC
AAACGTGGAC	TGGGACAACG	GGATTCTGAT	AAAGGGAAAT	TTCTGGTCTG
GTCCTGGCTG	TGTCATAGCT	CTTTATGTGT	GCATGGAGAG	CTCTTGATCC
AAGTAGAATA	TGTAACAATA	CAGACCAGGA	TCTTCCAGTC	AGTACTGCTG
GGTGGAAGTG	GGCGGGTGAT	GGTAGTTGCT	AGAAGAATCA	TTAAGACAGC
ATCTGCGGTG	AATGCGTCCC	AAAGCCTCGC	GGCATCAGTT	TCATCTCTAA
ACCATTAGCT	TACAGTTGAT	TCCGTTTCCT	GGGACAGAGA	AACATCCCCA
CGCGAAGTGA	CTGTGTTGTG	TATTCATAGC	ACTGCAAATA	AATTCACGCG
CCATGATGAA	ACCTTGCAAA	TACGCTTTGA	CCAAAAAAA	AAAAA

FIG. 35G-2

B:

GGGTGTGGGG	CAGCTGGGTG	GGAGCAGCGT	GCAGGCTACC	AGCACCAAGT
GGTGTGCCTC	TCCGGGGGTG	TGTGCAGAAG		_
AGGTACCACC	CCTAGACAGA	AATCGAAAAC	CCACTTCTCT	CGGTGCCCCA
AGCAATACAA	GCATTACTGC	ATCCATGGGA	GATGCCGCTT	CGTGATGGAC
GAACAAACTC	CCTCCTGCAT	CTGTGAGATA	GGCTACTTTG	GGGCCCGGTG
TGAGCAGGTG	GACCTGTTTT	ATCTCCAGCA	GGACAGGGG	CAGATCCTGG
TGGTCTGCTT	GATAGGCGTC	ATGGTGCTGT	TCATCATTTT	AGTCATTGGC
GTCTTGCACC	TGCTGTCATC	CTCTTCGGAA	ACATCGCAAA	AAGAAGAAGG
AAGAGAAAAT	GGAAACTTTG	AGTAAAGATA	AAACTCCCAT	AAGTGAAGAT
ATTCAAGAGA	CCAATATTGC	TTAACTTAAT	GATTATAAAG	TTACCACAAG
CTGATGGCGA	GCTCCAAAAG	ACCTGACTCA	TTTGCAGATG	GACAGGACAT
GTCTCAGGAA	AACAGCTTGC	AGAAATGAAT	GTTTAAATAT	TGTATTTGCT
TTTTCATTTT	ATTTGTAACT	GTGTGTTGTT	ATTGTTTTTA	ATAATGATAT
TTTTGTTACA	GTCTGATAGC	TGAGAAAAA	ATGACCTGGT	TAGGTGACGA
CAATAAGGGA	CATTGAATAT	AAACTTTGTT	GCTAGGATTA	TTAAACAAAC
AAAATTTGGA	AAGAAGTTAG	ATTTTAAGAA	CTGAGTCATG	GTCAGGCAGC
GATGGCACAC	ATCTTTAATC	CCAGCACTTG	GGAGCAGAGG	CAGGTAGATC
TCTGGGAGTT	TGAGGTCAGC	CTGGTCTACA	AAGCAAGATC	CAGGGTAGCC
AAGGTTATAT	AGAGAAACCC	TGTCTCACAA	AACCAAACCA	ACCAATCAAC
CAAACAGCAA	AACACCTGAG	TCGATAAAAG	GGCTCCCCAG	GTTTATACAC
TTACCGTATG	CTAAGAGCTT	GAAATATATT	GTTTCGTTTT	ATCGTTCAGT
AGTCTGTGAG	ATTGCATTTT	TTCTCATTCC	TATATATAAA	AAAGTTAAAT
GATTTCCCTT	AGATGTAGAG	ATAGAGGAAG	TTAGCGATGC	CATAGCTTT

FIG. 36 PSGen 27-Novel

NTCNNCTINN	CNNNGGCTGA	TATCNGGCNC	TTCNTCCNCG	ATCNCAGATA
CNNGCNCACC	GGNNNTNTCN	GNGGTNATCN	TCCNCCATCT	CTCNTCCCCG
ACNTGCACTC	CGGGTNTNNT	ACACNGGACA	CTGTATCNNA	CAGNAAACCT
NCCCNGGCCC	CAGGGATCAC	CATNCCTCGN	CCCNGCNTGT	NTATAANATC
AGGNNNTACA	TCNANGAACN	NACTATCACN	GNTCTCTNTT	NNCTCAGTGT
NCACCTTCCA	CTNCNGAANC	TNNTCGCTNC	NCCNCNGTTG	GGAAAGGCGA
NCNGTNCCGG	CNACATGCCG	TTTNCGNCNT	CTGNNCACNT	GGGGATCTNC
TNCAANGNAA	TCAATTNGNG	TAACCCACGG	TTTNCNCAAT	CACTACTTCT
CANNCNANGG	CCNTTGAANT	GTTATCCCAC	CACCANGGGG	CNANTCGGGA
CCTNACAATT	CATCCTCAGC	CGGCCCCAGN	CTTAAAAAAT	TCAAAGGNCN
CTTGCCCGCN	TTNTTNCCTT	AGCCCGCCNC	CNGACAACAN	CCNANNAACA
ACCCCONNTC	TTANGTTGCN	NANCCCACAG	GANNTTGNNA	TACCGGGTTT
CCCCNGAAAC	TNCTCAANGC	CNCCGTTCCA	ACCCCCGTTA	CGAAACCGTN
CCCNTTTCCT	TCCGAGNTTG	CCTATTAANN	CCCCCNAAGT	TCTNCTTCGT
TWGNTTCCTC	CGAAANG			